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Stefan Hein

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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/574,867  
Filing Date: April 06, 2006  
Appellant(s): HEIN, STEFAN

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Marcus P. Dolce  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 26 April 2010 appealing from the Office action mailed 03 September 2009.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 14-20 and 22-42 are pending.

Claims 14-20 and 22-42 are rejected.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

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REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

**(8) Evidence Relied Upon**

3,351,348	Dupuis	11-1967
4,808,444	Yamazaki et al.	09-1987
3,807,058	Seminski	04-1974

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 14-20, 22-24, and 26-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuis in view of Yamazaki et al. (4,808,444). Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuis in view of Seminski (3,807,058). Claims 30 and 35 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuis in view of Stahl (2,894,483).

**(10) Response to Argument**

Applicant submits that it is not persuasive to combine the prior art of Dupuis in view of Yamazaki as set forth by the Examiner. In regard to Claims 14-20, 22-24, 26, 27, 37, and 41, Applicant asserts that Dupuis already accounts for substrates of varying thicknesses since the rollers 31 and 32 are spaced from the partition 6 and the pressure differential between the sealing

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chamber 17 and the vacuum metallization chamber 5 presses the first run 36 of the sealing web 35 against the exterior surface 16 of the partition 6 (see page 9, para. 4). This is not persuasive because the roller 32 is not movable with respect to the exterior surface 16 (see Dupuis, col. 3, lines 46-58). As such, the space between the roller 32 and the exterior surface 16 is fixed thereby restricting the thickness of the webs to a maximum value. If the desired webs were to be thicker than this space, they would not pass through the space between the roller 32 and the exterior surface 16. However, Yamazaki makes up for this deficiency. Yamazaki discloses a sealing roller for flexible substrate handling and is therefore analogous art suitable for combining with the primary reference of Dupuis. Yamazaki teaches where a single roller 1 is movable to engage an arcuate sealing surface 4 thereby making the space between the roller 1 and arcuate sealing surface 4 adjustable. Therefore, it would have been obvious by one of ordinary skill in the art to replace the roller assembly 30 of Dupuis with the single roller of Yamazaki so as to allow of webs of varying thicknesses.

Applicant asserts that Dupuis teaches away from the combination since the resulting structure would not provide for a seal between the webs 38 and 39 of Dupuis as it enters the opening 11 of the vacuum metallization chamber 5 because the web 3 of Yamazaki is always spaced from any surface (see page 9, para. 5). This is not persuasive because Yamazaki teaches where gas is evacuated at the sealing surface 4 by suction (see Yamazaki, col. 4, lines 49-56). As such, the evacuation of gases at the exterior surface 16 of Dupuis would necessarily create a seal between the two chambers. Furthermore, the primary reference of Dupuis teaches where it is known to press the roller 32 onto the exterior surface 16 so as to not leave a space in between.

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Therefore, Applicant's argument constitutes a piecemeal analysis of references since the combination of references necessarily teaches all that is required by Claim 14.

Applicant asserts that Dupuis teaches away from depositing any material onto the webs 38 and 39 before they enter the vacuum metallization chamber 5 since any such deposition would diminish the coating capabilities of the system with the vacuum metallization chamber 5 (page 9, para. 6). This is not persuasive because Applicant provides no evidence within the prior art of Dupuis that any such deposition onto the webs, or pretreatment, before entering the chamber 5 would be detrimental to the webs. Therefore, Applicant's argument is mere speculation. Dupuis discloses a vacuum chamber seal assembly for the generic coating of webs. Any such pretreatment of the webs, if desired, would of course be any process chosen to enhance any process carried out in the chamber 5.

Applicant asserts that the system of Yamazaki is unworkable in the system of Dupuis since Yamazaki includes a system for coating an exterior surface of the web and to use the system set forth by the Examiner would cause the exterior surface of the web to abut the exterior surface 16 of Dupuis right after coating, thereby ruining the coating (see page 10, para. 2). This is not persuasive because the Applicant is arguing that the prior art devices are not physically combinable. However, the test for obvious is not whether the features of a secondary reference may be bodily incorporated in to the structure of the primary reference, rather, the test is what the combined teachings of those references would have suggested to one of ordinary skill in the art. Furthermore, the primary reference teaches where the exterior web surface is not coated and therefore makes contact with the exterior surface 16. If the coating process of the web of

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Yamazaki is not desired, then one of ordinary skill in the art would not incorporate it into the prior art of Dupuis if it were to lead to the detriment of the web.

Applicant asserts that Yamazaki is substantially different from the system of Dupuis since Yamazaki does not disclose any sealing or different regions of atmospheric pressures (see page 10, para. 3). This is not persuasive because, as explained above, Yamazaki teaches where gas is evacuated from the space between the roller 1 and arcuate sealing surface 4 by suction. By incorporating the arcuate sealing surface for the exterior surface 16 of Dupuis, a seal is necessarily formed between the chambers 17 and 5. Yamazaki need not show different regions with different atmospheric pressures since these are limitations met by the primary reference of Dupuis. Applicant further asserts that Yamazaki does not disclose traversing a web through an opening within the "suction chamber" 4. This is not persuasive because the traversing of a web through an opening is met by the primary reference of Dupuis and therefore Applicant's argument constitutes a piecemeal analysis of references. Applicant further asserts that the "suction chamber" 4 of Yamazaki has no sealing surface adapted to fit to a cylinder-like sealing body. This is not persuasive because, in Figure 1 of Yamazaki, the roller 1 is cylindrical to fit to a cylinder like sealing body, or arcuate sealing surface 4. The fact that the web is wrapped around the roller and not fed through the "suction chamber" 4 does not preclude the suitability of Yamazaki as a secondary reference since Dupuis teaches where the web is wrapped partially around a roller 32 and then traverses an opening 12. As such, the rejections of Claims 15-20, 22-24, 26, 27, 37, and 41 are maintained.

In regard to Claims 28 and 29, Applicant asserts that the prior art of Dupuis does not teach a power drive that moves the sealing means 30 between an inactive and a close position

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and it is not obvious to combine the references of record to result in any such power drive as it is not obvious to move any sealing body in Dupuis between an inactive and closed position (col. 11, para. 1). This is not persuasive because the secondary reference of Yamazaki teaches where the roller 1 is moved between positions by a power drive mechanism 5, 6, 7 to space the roller from the web and sealing surface as explained in the previous final Office action. As such, the rejection of Claim 29 is maintained.

In regard to Claim 30, Applicant asserts that the cited art of record does not disclose where the movable sealing body is tightened against a sealing surface by an accumulator and that the accumulation of pressure in Dupuis is not an accumulator (see page 11, para. 3). This is not persuasive because Applicant has not structurally distinguished the limitation of "an accumulator" of the claimed invention from the accumulator formed by the accumulation of pressure in Dupuis. Dupuis teaches where pressure accumulates in chamber 17 via a gas source 24. The increase of pressure works to force the sealing body 30 to the exterior surface 16 to thereby form a seal. As such, the chamber 17 and gas source 24 function as the claimed "accumulator".

In regard to Claim 39, Applicant asserts that the prior art of record does not disclose at least one movable sealing body that closes an opening by abutting a sealing surface to wholly overlap the opening and that the resulting structure of Dupuis in view of Yamazaki would not have a sealing body wholly overlapping the opening (see page 12, para. 2). This is not persuasive because the primary reference of Dupuis explicitly teaches where the opening 12 is wholly overlapped by the sealing body 30 in Figure 2. As such, the resulting structure of Dupuis in view of Yamazaki would necessarily teach where a single cylindrical roller moves into and out of



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engagement with an arcuate sealing surface which wholly overlaps the opening where a web is traversed therethrough.

In regard to Claims 31-33, 36, 38, and 42, Applicant asserts that Dupuis in view of Yamazaki does not include at least one movable sealing body and a sealing surface and that each have an arcuate contour and a radius of the sealing surface that is larger or equal to a radius of at least one movable sealing body (see page 12, para. 13). This is not persuasive because, as explained above, Yamazaki teaches where a movable sealing body 1 is cylindrical thereby having a radius. In Figure 2, it engages an arcuate sealing surface 4 which necessarily has a radius larger than that of the movable sealing body so as to accommodate it. As such, the rejections of Claims 32, 33, 36, and 42 are maintained.

In regard to Claim 34, Applicant asserts that Dupuis in view of Yamazaki does not teach a drive mechanism (see page 13, para. 4). This is not persuasive as per the response to Claim 28 above.

In regard to Claim 35, Applicant asserts that Dupuis in view of Yamazaki does not teach an accumulator. This is not persuasive as per the response to Claim 30 above.

In regard to Claim 40, Applicant asserts that Dupuis in view of Yamazaki does not teach where the sealing surface wholly overlaps the opening. This is not persuasive as per the response to Claim 39 above.

Claim 25 is rejected under 35 U.S.C. 103(a) as being obvious over Dupuis in view of Yamazaki further in view of Seminski. In light of the rejection of Claim 14, this rejection is maintained.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jeremy S. Baskin/  
Examiner, Art Unit 3753

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